Aug. 11, 1964 R. B. CARTWRIGHT 3,144,194

POPCORN PACKAGE

Filed Nov. 6, 1961

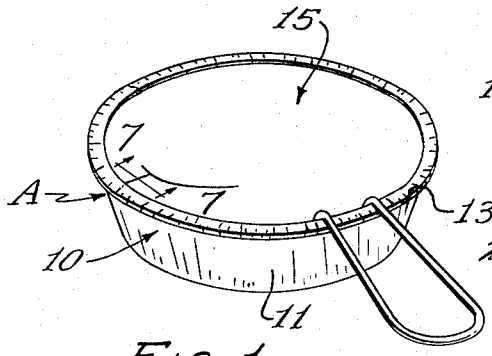


FIG. 1

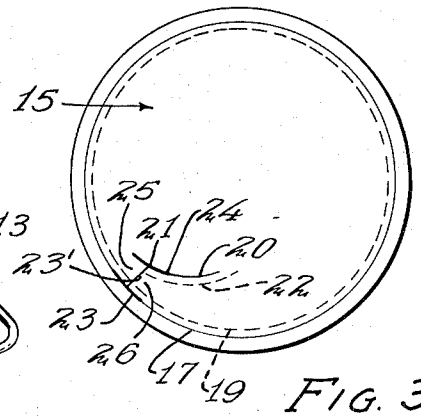


FIG. 3

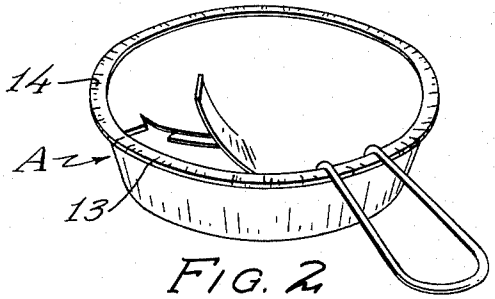


FIG. 2

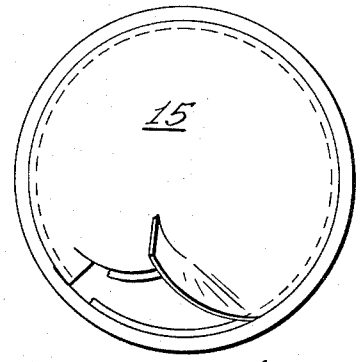


FIG. 4

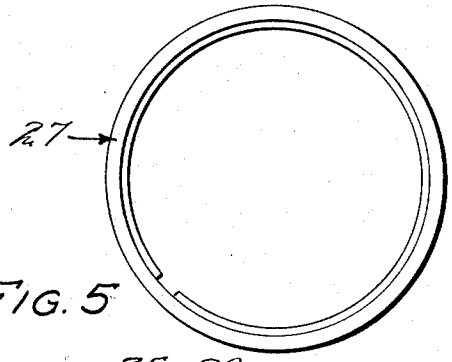


FIG. 5

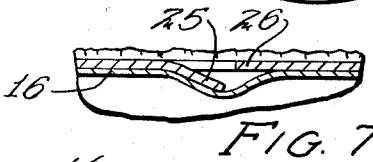


FIG. 7

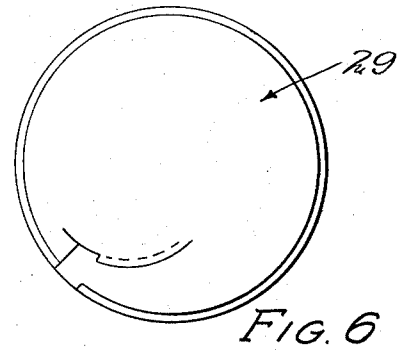


FIG. 6

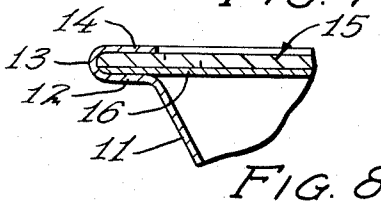


FIG. 8

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POPCORN PACKAGE

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This invention relates to an improvement in popcorn package and deals particularly with a receptacle including a pan of foil or like metal and a protective cover panel which may be readily opened.

For some time, popcorn has been sold in foil containers which may be used to contain the popcorn both before and during the popping operation. These containers are usually closed by means of a cover panel of paperboard. Beneath the paperboard cover is an inner covering member usually formed of foil capable of expanding to form a drum shaped top to enclose the popcorn during the popping operation. When the corn is to be popped, the paperboard cover is removed and the pan placed upon a stove and heated until the corn is popped. During this time the expandable cover slowly expands until the popping operation is completed.

One of the difficulties which has been experienced with this construction lies in the fact that unless the cover panel is carefully removed, the expandable inner cover may be punctured, permitting the escape of the contents. As the marginal edge of the cover is held in place by the crimping of the edge of the pan, the cover must be carefully removed to protect the inner expandable cover. It is an object of the present invention to provide a cover having an outer periphery which remains crimped in the periphery of the pan and which includes a center portion which may be readily removed and discarded.

A feature of the present invention resides in the provision of a novel and effective means of removing the center portion of the cover panel without disturbing the marginal rim thereof. In the formation of the cover panel, a weakened line of separation is provided just inwardly of the marginal edge of the cover panel and which may be used to divide the center portion of the cover panel from the encircling rim thereof. A second weakened line of separation has one end terminating in closely spaced relation to the first weakened line of separation and diverges inwardly to provide a continuously wider area between the two weakened lines. A cut line connects the outer end of the second weakened line of separation to the first to provide access to the under side of the cover panel. By grasping a portion of the cover panel between the weakened lines of separation, and exerting an upward pull thereupon, the cover panel will tear to the end of the second weakened line. A continued upward pull may result in separating the cover panel along the first weakened line of separation entirely about the cover panel so that the center portion may be removed, leaving the marginal rim of the cover panel clamped between the marginal flanges of the pan.

A further feature of the present invention resides in providing weakened lines of separation which comprise a circular cut score line extending partially through the paperboard from the upper surface thereof inwardly of the margin of the cover panel and a second concentric line extending partially through the paperboard from the under surface thereof, the paperboard tearing intermediate the surfaces upon separation. Preferably, the second weakened line also includes a cut score line in diverging relation to the concentric cut score lines and in the outer surface of the paperboard, and a second parallel cut score line in the under surface of the paperboard outwardly of the outer cut score line and between the outer cut score line and the concentric cut score line.

An added feature of the present invention resides in the fact that by leaving the peripheral rim of the cover panel clamped within the marginal edge of the pan-shaped receptacle, this rim may be used for holding the inner expandable cover in place. If the cover panel were removed in its entirety, some other means would be required for attaching the marginal edges of the pan and expandable cover.

A further feature of the present invention resides in the provision of a pair of cut lines which communicate with the connecting cut lines and preferably intersect the connecting cut line. The cut lines of the pair extend for a short distance along the weakened lines of separation and provide an effective means of providing access to the end of the area between the weakened line and of starting the tearing operation.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification;

FIGURE 1 is a perspective view of the closed receptacle in readiness for use.

FIGURE 2 is a perspective view similar to FIGURE 1 showing the start of the cover-removing operation.

FIGURE 3 is a top plan view of the cover panel.

FIGURE 4 is a top plan view of the cover panel after it has been partially opened.

FIGURE 5 is a top plan view of the rim of the cover panel after the center portion has been removed.

FIGURE 6 is a bottom plan view of the center portion of the cover panel after it has been removed.

FIGURE 7 is a perspective view through a portion of the cover, the position of the section being indicated by the line 7—7 of FIGURE 1.

FIGURE 8 is a vertical sectional view through a portion of the periphery of the packages.

The popcorn package is shown in its completed form in FIGURE 1 of the drawings. The package includes a pan-shaped receptacle **10** having a circular bottom panel, not illustrated, and an upwardly and outwardly inclined side wall portion **11**. As indicated in FIGURE 8, the upper edge of the side wall **11** is provided with an outturned flange **12**. The flange **12** is connected by the rounded outer portion **13** to the inwardly crimped retaining flange **14** which overlies the peripheral edge of the cover panel which is indicated in general by the numeral **15**. The expandable inner cover **16** is marginally clamped between the rim of the cover panel **15** and the flange **14**.

As indicated in the drawings, the outer or upper surface of the cover panel **15** is provided with a circular cut score line **17** which extends partially through the paperboard, terminating short of the under surface. A concentric cut score line **19** of slightly shorter radius is provided in the under surface of the paperboard, the cut score line **19** also extending but partially through the paperboard. When the center portion of the cover panel is opened, the board splits between the upper and lower surfaces between the cut score lines **17** and **19**.

A curved cut score line **20** is provided in the outer surface of the cover panel **15**, the line **20** having an end **21** which terminates in spaced relation to the concentric score lines **17** and **19** and relatively close thereto. The score line **20** diverges inwardly away from the concentric score lines **17** and **19** so that the area defined between the weakened lines of separation gradually increases in width. A parallel cut score line **22** is provided in the under surface of the panel **15** in spaced relation to the cut line **20** and parallel thereto. The cut score line **22**

is outwardly of the cut score line **20** or between the cut score line **20** and the concentric lines **17** and **19**.

A cut line **23'** extends from the end **21** of the cut score line **20** to the outer cut score line **17**. A pair of cut lines **23** and **24** intersect the cut line **23'** at the ends thereof, the cut line **23** extending a short distance along the outer cut score line **17** and the cut line **24** extending a short distance along the cut score line **20**. This arrangement provides a generally rectangular tab **25** between the cut lines **23** and **24** and extending to the cut line **23'** which may be flexed downwardly or inwardly an amount sufficient to permit the area of the panel on the opposite side of the cut score line to be engaged between the fingers. By pressing the tab **25** downwardly, the tab **26** on the opposite side of the cut line **23'** may be grasped and pulled upwardly, tearing the paperboard between the cut score lines **17** and **19**, and between the cut score lines **20** and **22**.

Because of this arrangement, the area between the weakened lines of separation may be drawn upwardly in the manner illustrated in FIGURE 2. A further upward pull upon this area, permits this area to be used as a handle to pull the remainder of the center portion away from the rim. As a result, the top panel **15** is divided into a ringlike rim section which is indicated in general by the numeral **27**, and a disklike center portion **29** which is discarded. Due to the fact that the ring shaped peripheral portion **27** remains crimped in the peripheral edge of the pan **10**, the marginal edge of the expandable cover portion **16** also remains peripherally attached to the pan, and this cover portion expands through the opening formed in the rim portion **27** as the corn is popped.

In accordance with the patent statutes, I have described the principles of construction and operation of my improvement in popcorn package, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. In combination, a pan and a removable pan cover, the cover comprising a disk of paperboard, and the pan including a bottom, upwardly extending side walls, an outwardly extending peripheral flange at the top of said walls on which said cover rests, and an inturned flange marginally secured to said outwardly extending flange and overlying the marginal edge of said cover, the cover including a weakened line of separation inwardly of said marginal edge including a circular cut score line extending partially through the paperboard from the upper surface thereof inwardly of said marginal edge of said cover, and a concentric circular cut score line of slightly shorter radius extending partially through said paperboard from the under surface thereof, a second relatively short cut score line in the upper surface of the paperboard terminating at one end in closely spaced relation to said concentric cut score lines and diverging inwardly toward the center of the cover and terminating in a more

widely spaced relation to said concentric score lines, and a cut score line in the under surface of the paperboard running parallel to said second score line and between said second cut score line and said concentric cut score lines, said relatively short cut score lines extending but a relatively short angular distance as compared to the concentric cut score lines, and a cut line connecting said outer concentric cut score line to said one end of said second cut score line.

2. The structure of claim 1 and including cut lines extending along said outer concentric cut score line and along said second cut score line for a short distance and communicating with said connecting cut line.

3. The structure of claim 1 and including a pair of cut lines extending for a short distance along one of said concentric cut score lines and along said second cut score line communicating with said connecting cut line.

4. The structure of claim 3 and in which said cut lines of said pair intersect said connecting cut line.

5. In combination, a pan and a removable pan cover, the cover comprising a disk of paperboard, and the pan including a bottom, upwardly extending side walls, an outwardly extending peripheral flange at the top of said side walls on which said cover rests, and an inturned flange marginally secured to said outwardly extending flange and overlying the marginal edge of said cover, the cover including a weakened line of separation inwardly of said marginal edge including a circular cut score line extending partially through the paperboard from the upper surface thereof inwardly of said marginal edge of said cover, and a concentric circular cut score line of slightly shorter radius extending partially through said paperboard from the under surface thereof, a second weakened line of separation in said disk, a second relatively short weakened line of separation in said disk terminating at one end in closely spaced relation to said concentric cut score lines and diverging inwardly toward the center of the cover and terminating in a more widely spaced relation to said concentric score lines, said second weakened line of separation extending but a relatively short angular distance as compared to said concentric cut score lines, and a cut line connecting said outer concentric cut score line to said one end of said seond weakened line of separation.

6. The structure of claim 5 and including a pair of cut lines communicating with said connecting cut line and extending for a short distance along said second weakened line and along one of said concentric cut score lines.

7. The structure of claim 6 and in which said cut lines of said pair intersect said connecting cut line.

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